

Application No. 10/810,049
Amendment dated January 18, 2006
Reply to Office Action of July 18, 2005

LISTING OF CLAIMS

1. (Currently Amended) A multi-layer thin film coating for use with photochromic lenses, said multi-layer thin film comprising a plurality of dielectric layers for deposition onto a photochromic lens, said dielectric layers selected and arranged so as to reflect an amount less than about 15% of spectral UVA radiation in a range between 315 and 400 nm; said dielectric layers selected and arranged so as to exhibit a colored appearance when observed from a side opposite from the photochromic lens.

2. (Original) The multi-layer thin film coating according to claim 1, wherein the range of spectral UVA radiation is from about 315 to 400 nm.

3. (Original) The multi-layer thin film coating according to claim 1, wherein the multi-layer thin film coating reflects less than 6% of spectral UVA radiation.

4. (Original) The multi-layer thin film coating according to claim 1, wherein the plurality of dielectric layers comprises SiO_2 .

5. (Original) The multi-layer thin film coating according to claim 1, wherein the plurality of dielectric layers comprises TiO_2 .

6. (Original) The multi-layer thin film coating according to claim 1, wherein the plurality of dielectric layers alternate low and high refractive indices.

7. (Original) The multi-layer thin film coating according to claim 1, wherein the plurality of dielectric layers comprises ZrO_2 .

8. (Original) The multi-layer thin film coating according to claim 1, wherein the plurality of dielectric layers comprises twelve layers.

9. (Original) The multi-layer thin film coating according to claim 1, wherein the plurality of dielectric layers comprises four layers.

Application No. 10/810,049
Amendment dated January 18, 2006
Reply to Office Action of July 18, 2005

10. (Original) The multi-layer thin film coating according to claim 1, wherein the plurality of dielectric layers comprises up to 100 layers.

11. (Original) The multi-layer thin film coating according to claim 1, wherein the multi-layer thin film coating has an activation value greater than 40% of the activation value of the photochromic lens.

12. (Original) The multi-layer thin film coating according to claim 1, wherein the multi-layer thin film coating has an activation value greater than 90% of the activation value of the photochromic lens.

13. (Original) The multi-layer thin film coating according to claim 1, wherein the multi-layer thin film coating has an activation value greater than 97% of the activation value of the photochromic lens.

14. (Original) The multi-layer thin film coating according to claim 1, wherein the multi-layer thin film coating has an activation value substantially equal to the activation value of the photochromic lens.

15. (Original) The multi-layer thin film coating according to claim 1, wherein the multi-layer thin film coating has an activation value greater than about 25%.

16. (New) The multi-layer thin film coating according to claim 1, said dielectric layers selected and arranged so as to exhibit a mirror like appearance at least when observed from a side opposite from the photochromic lens.

17. (New) The multi-layer thin film coating according to claim 1, said dielectric layers selected and arranged so as to exhibit a silver like appearance at least when observed from a side opposite from the photochromic lens.

Application No. 10/810,049
Amendment dated January 18, 2006
Reply to Office Action of July 18, 2005

18. (New) The multi-layer thin film coating according to claim 1, said dielectric layers selected and arranged in a sequence: TiO₂, SiO₂, TiO₂, SiO₂, TiO₂, SiO₂, TiO₂, SiO₂, TiO₂, SiO₂, so as to obtain a silver mirror like appearance when observed from a side opposite from the photochromic lens.

19. (New) A photochromic sunglass lens having a colored appearance, the photochromic sunglass lens having a colored appearance and comprising a multi-layer thin film, the multi-layer thin film comprising a plurality of SiO₂ layers and a plurality of TiO₂ layers, wherein the film reflects an amount less than about 15% of spectral UVA radiation in a range between 315 and 400 nm.

20. (New) The lens of claim 19, wherein the colored appearance comprises a mirror like appearance.

21. (New) The lens of claim 19, comprising a twelve layer arrangement comprising alternating TiO₂ and SiO₂ layers.

22. (New) The lens of claim 19, wherein the colored appearance comprises a white silver like appearance.

23. (New) The lens of claim 19, comprising a twelve layer arrangement comprising TiO₂, SiO₂ and ZrO₂ layers.

24. (New) A method of creating a colored photochromic lens having a reflectance of less than about 15% of spectral UVA radiation in a range between 315 and 400 nm, the method comprising applying a plurality of layers of TiO₂ and SiO₂ onto a photochromic lens.

25. (New) The method of claim 24, the method comprising applying twelve layers of TiO₂ and SiO₂ on the photochromic lens in a sequence: TiO₂, SiO₂, TiO₂, SiO₂, TiO₂, SiO₂, TiO₂, SiO₂, TiO₂, SiO₂, in order to obtain a silver mirror like appearance.

Application No. 10/810,049
Amendment dated January 18, 2006
Reply to Office Action of July 18, 2005

26. (New) The method of claim 24, the method comprising applying twelve layers of TiO₂, SiO₂ and ZrO₂ on the photochromic lens in a sequence: TiO₂, SiO₂, TiO₂, SiO₂, ZrO₂, SiO₂, TiO₂, SiO₂, TiO₂, SiO₂, ZrO₂, SiO₂, in order to obtain a white silver like appearance.